

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-8 and 16-17 are presently active, Claims 9-15 have been previously canceled without prejudice, Claims 1, 2 and 16-17 are amended. No new matter is added.

In the outstanding Office Action, Claims 1-8 and 16-17 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite; Claims 1 and 16-17 were rejected under 35 U.S.C. § 102(e) as anticipated by Kitsutaka (U.S. Pat. No. 7,042,463); Claims 2-8 were objected to as dependent upon a rejected base claim, but were indicated as being allowable if rewritten in independent form.

Firstly, Applicants acknowledge with appreciation the indication of allowable subject matter in Claims 2-8. However, Claims 2-8 are presently maintained in dependent form, because Applicants believe that Claim 1 as currently amended includes allowable subject matter.

Regarding the 35 U.S.C. § 112, second paragraph, rejection of Claims 1-8 and 16-17, Claims 1, 16 and 17 are amended to clarify that by superposing the original foreground image over the alpha-blended primitive-processed image, only the anti-aliased edges of the alpha-blended primitive processed image remain exposed. Since Claims 2-8 are dependent from Claim 1, substantially the same arguments set forth above also apply to Claims 2-8. Further, Claim 2 is amended to clarify that the display signal is generated based on a result of the superposing. Thus, it is respectfully submitted that the 35 U.S.C. § 112, second paragraph, rejection is overcome.

Regarding the 35 U.S.C. § 102(e) rejection of Claims 1 and 16-17, Applicants respectfully submit that the rejection is overcome because, in Applicants' view, amended independent Claims 1 and 16-17 patentably distinguish over Kitsutaka as discussed below.

If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim languages.

Claim 1 recites, *inter alia*, “applying anti-aliasing filtering to edges of each primitive of said group of graphics primitives to generate primitive-processed image signals,” “preparing said image background for display,” “first processing said primitive-processed image signals to alpha blend said primitive-processed image over said image background, ...” and “second processing said original foreground image signals to superpose said original foreground image over said alpha-blended primitive-processed image so that only the anti-aliased edges, which extend outside an area of said original foreground image, of said alpha-blended primitive processed image remain exposed.”

First, Kitsutaka describes alpha-synthesis process applied to the entire image, not to individual objects, as shown in Fig. 2 of Kitsutaka, which shows rendering a “full” image of a scene. That is, Kitsutaka describes rendering a “full” image of a scene including objects A, B, C and D (the original image) and generating a defocused version (a blurred version) of the full image. The objects A, B, C and D depicted in the image have depth values Z_A , Z_B , Z_C and Z_D with respect to the virtual camera 10. Then, a “depth of focus” effect is generated. For example, if the focal point of the virtual camera 10 is somewhere between the objects A and B in Fig. 2, then the objects A and C is taken from the sharp original image while the objects B and D are taken from the blurred or defocused image. This is achieved by alpha blending the original and defocused images according to the Z-values of the objects with respect to the virtual focal point (Kitsutaka at cols. 8 and 9). Thus, areas of an image located farther than the focus of the virtual camera are predominantly from the defocused version of the original image (Kitsutaka at col. 9, lines 1-3).

However, if this alpha-synthesis described in Kitsutaka corresponds to the “first processing to alpha blend the primitive-processed image over the image background” as recited in Claim 1, then Kitsutaka does not teach the “second processing” as recited in Claim 1. On the other hand, if the alpha-synthesis described in Kitsutaka corresponds to the “second processing” as recited in Claim 1, then Kitsutaka does not teach the “first processing” as recited in Claim 1.

In other words, Kitsutaka uses only two “layers” (original image, defocused image), although the invention recited in Claim 1 uses three “layers” (primitive-processed image, image background, original foreground image) of the object.

In this regard, the outstanding Office Action asserts that Kitsutaka at col. 16, lines 62-65 teaches preparing an image background for display and alpha-blending the primitive processed image over the image background (Office Action at page 6, lines 8-17).

However, Kitsutaka at col. 16, lines 62-65 describes:

In the invention in which the alpha-value is set as in FIGS. 6A to 9D, the set alpha-value may be utilized to various *other* image drawings, *rather than the synthesis between the original image and the defocused image*. For example, the set alpha-value may be used to make an object located farther than the viewpoint translucent so that it will merge into the background.
(emphasis added)

Thus, Kitsutaka clearly distinguishes the process of making the object fading with distance from the blending process, and the blending process described here is part of original rendering of the image before the synthesis of the original image and the defocused image. Thus, Kitsutaka does not teach alpha-blending the defocused image over the image background. Therefore, even if Kitsutaka describes preparing an image background for display, Kitsutaka fails to teach “first processing said primitive-processed image signals to alpha blend said primitive-processed image over said image background,” as recited in Claim 1.

Second, the outstanding Office Action states that Kitsutaka teaches at col. 8, lines 57-63 that the original image is alpha-blended with the defocused image, which results in the original image and the defocused edges which extend outside an area of the original image remain exposed (Office Action at page 7, lines 15-17).

However, Kitsutaka only describes synthesizing the original and defocused images according to the Z-values of the objects with respect to the virtual focal point. If the original image is superposed over the defocused images, an anti-aliased edge of the defocused image cannot extend beyond the original image, since the original image comprises an “entire” scene. Thus, Kitsutaka does not teach or even suggest synthesizing the original and defocused images so that only the anti-aliased edges, which extend outside the original image, of the defocused image remain exposed. In addition, the defocused image described in Kitsutaka is not “*alpha-blended* primitive-processed image” as recited in Claim 1, as discussed above.

Thus, Kitsutaka fails to teach or suggest “second processing said original foreground image signals to *superpose said original foreground image over said alpha-blended primitive-processed image* so that *only the anti-aliased edges, which extend outside an area of said original foreground image, of said alpha-blended primitive processed image remain exposed,*” as recited in Claim 1.

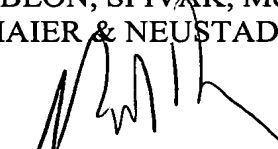
Similar arguments as set forth above apply to Claims 16-17.

Accordingly, independent Claims 1 and 16-17 patentably distinguish over Kitsutaka. Therefore, Claims 1 and 16-17 and the pending Claims 2-8 dependent from Claim 1 are believed to be allowable.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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